Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of RM-11831

AMENDMENT OF PART 97 TO FURTHER DIGITAL TRANSPARENCY

TO: The Chief, Wireless Telecommunications Bureau

I wholeheartedly support RM-11831 for the following reasons:

A. In the matter of Paragraph 13, asking for clarification and simplification of the language, is in essence an alignment with the FCC's earlier request for input on simplification, clarification, and the removal of ambiguous rule language. Furthermore, I think it is in the interest of national security that we have open source decoding methods available to determine if an illegal intruder is present or if the communication is legal under Part 97 rules.

> "…13. Because the protocols defined in § 97.309(a)(4) are outdated and no longer widely used, simplifying the language would remove ambiguity about what constitutes "publicly documented technical characteristics" by requiring any protocol to be freely decodedable. Proposed language simplification:
> § 97.309 RTTY and data emission codes. (a) Where authorized by §§97.305(c) and 97.307(f) of the part, an amateur station may transmit a RTTY or data emission using the following specified digital codes: (1) The 5-unit, start-stop, International Telegraph Alphabet No. 2, code defined in ITU–T Recommendation F.1, Division C (commonly known as "Baudot"). (2) The 7-unit code specified in ITU–R Recommendations M.476–5 and M.625–3 (commonly known as "AMTOR"). (3) The 7-unit, International Alphabet No. 5, code defined in IT–-T Recommendation T.50 (commonly known as "ASCII"). (4) An amateur station transmitting a RTTY or data emission using a digital code specified in this paragraph may use any technique whose technical characteristics have been documented publicly, such as CLOVER, G-TOR, or PacTOR, and the protocol used can be monitored, in it's entirety, by 3rd parties, with freely available open source software, for the purpose of facilitating communications. .."

B. In the matter of paragraph 14 this clarifies and reinforces the notion that any digital communications methodology must be open-sourced and be available for monitoring in order to determine if it truly complies with current FCC Rules. Without the code(s) being publicly available and in the public domain, a digital method cannot be decoded and monitored, nor can the Amateur community sufficiently self-police those communications.

> "…14. The minor language change requested in this part would ensure amateur radio digital modes remain openly decodable and available for monitoring by the FCC, the amateur community at large, and any intruder watch groups, for purposes of rules compliance and in the case of amateur operators, self-policing. This request changes nothing in the "specified codes section" authorized by Part 97.309. 15. In conclusion this petition only addresses two very specific areas of concern expressed by many amateur radio operators in prior proceedings: i) interference created by stations authorized under Part 97.221 and ii) amateur digital mode transparency, present and future…"

C. Digital communications is both technically interesting and intriguing. I would, however, ask the Amateur community if they really want to allow the ARS to become another Internet pipeline when we have external internet services available. The ARS, historically, has been an avenue to further explore experimental communications technologies. Digital communications methods do not further the basic tenet and spirit of ARS if those digital communications technologies create interference and cannot be properly identified and monitored.

Summary and Opinions:

I would encourage the Commission to act upon petition RM-11831as soon as feasible as it will reinforce and clarify the notion of open sourcing and the decoding of digital methods if digital methods are to be used in Amateur Radio communications.

Secondly, we must never allow the ARS to be undermined and unduly influenced by commercial interests.

Finally, it is also my view that we DO NOT need another Internet pipeline and that we should never allow the ARS to become an avenue for a de facto Internet, no matter how interesting and intriguing digital communications might be.

Kindest Regards,

Phillip Legate – Adjunct Professor of Physics and Electronics Engineering
2695 Pebble Creek Drive
Marion, Iowa 52302
11 April, 2019
General Radiotelephone Certificate PG-17-16104
ARS Extra Class License - AC0OB
Experimental License WJ2XEV